

# PROJECT DESCRIPTION

## I. GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 122 (SECURITY BLVD)/ COOKS LANE AND FOREST PARK AVENUE IN BALTIMORE COUNTY.

MD 122 (SECURITY BLVD)/ COOKS LANE IS ASSUMED TO TRAVEL IN AN EAST-WEST DIRECTION.

## II. INTERSECTION OPERATION

THE INTERSECTION SHALL CONTINUE THE THREE-PHASE, FULL TRAFFIC ACTUATED OPERATION. THE EXISTING STREET LIGHTING WILL BE REPLACED. A VIDEO CAMERA SHALL PROVIDE FOR PRESENCE AND ADVANCE DETECTION ON FOREST PARK AVE.

A SOLID STATE EIGHT-PHASE, FULLY-TRAFFIC-ACTUATED CONTROLLER WITH AMPLIFIERS, CAMERA INTERFACE AND ALL NECESSARY EQUIPMENT HOUSED IN A SIZE '6' BASE MOUNTED CABINET SHALL BE INSTALLED AT THE INTERSECTION.

## III. SPECIAL NOTES:

THE CONTRACTOR SHALL CONTACT MR. ROBERT SNYDER, TRAFFIC OPERATIONS, AT 410-788-7630: 72 HOURS PRIOR TO THE COMPLETION OF THE ABOVE RECONSTRUCTION TO HAVE A TELEPHONE DROP ARRANGED. THE ADDRESS OF THE NEAREST HOUSE NUMBER IS PROVIDED ON THE PLAN.

# EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
9000	1 EA	SOLID STATE, FULL- TRAFFIC- ACTUATED, EIGHT-PHASE CONTROLLER WITH FOUR CHANNEL AMPLIFIER, CAMERA INTERFACE AND ALL NECESSARY EQUIPMENT HOUSED IN SIZE '6' BASE MOUNTED CABINET
9017	1 EA	27' STEEL POLE (27' CUT TO 21') WITH 38' MAST ARM (FOUR-1/2" X 60" ANCHOR BOLTS)
9026	1 EA	27' STEEL POLE WITH TWIN 50' X 64' MAST ARM (50' CUT TO 40') (NOTE: THE FOUR- 2" X 90" ANCHOR BOLTS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR)
9571	35 SF	SHEET ALUMINUM FOR MAST ARM MOUNTING R3-5R "RIGHT TURN ONLY" SIGN (30" X 36") D3-2 "ARROW, Forest Park AVE/ Forest Park AVE, ARROW" (VARIABLE X 16") DUALFACED D3-2 "ARROW, Security BLVD", "Cooks LN, ARROW" (VARIABLE X 32")

## PROJECT CONTACTS

CONTACT PERSONS FOR DISTRICT 4 ARE AS FOLLOWS:

MR. RANDALL SCOTT  
ASSISTANT DISTRICT ENGINEER  
TRAFFIC - 410-321-2781

MR. GRADON TOBERY  
ASSISTANT DISTRICT ENGINEER  
CONSTRUCTION - 410-321-3600

MR. STEVE MARCISZEWSKI  
ASSISTANT DISTRICT ENGINEER  
MAINTENANCE - 410-321-2761

MS. SUENETTE POPE  
ASSISTANT DISTRICT ENGINEER  
UTILITIES - 410-321-2841

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY:

MR. RICHARD DAFF SR.  
CHIEF, TRAFFIC OPERATIONS  
410-787-7630

MR. ROBERT SNYDER  
ASSISTANT DIVISION CHIEF,  
TRAFFIC OPERATIONS DIVISION  
410-787-7630

MR. ED RODENHIZER  
TEAM LEADER - SIGNAL OPERATIONS  
410-787-7650

MR. DERRICK DICKERSON  
PROJECT MANAGER - SIGNAL DESIGN  
410-787-5856

# EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR:

ITEM NO.	QUANTITY	DESCRIPTION
1001	2 EA	MAINTENANCE OF TRAFFIC
2001	.2 CY	CLASS 2 EXCAVATION
2002	2 CY	TEST PIT EXCAVATION
5001	25 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS (ANY WIDTH)
5006	25 LF	24" APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
6004	15 SF	4" CONCRETE SIDEWALK
8001	9.5 CY	CONCRETE FOUNDATION
8009	1 EA	CONTROL CABLE, 300' VIDEO DETECTOR CAMERA TO CONTROLLER
8013	2 EA	INSTALL STEEL POLE WITH SINGLE OR TWIN MAST ARMS (NOTE: FOUR- 2" X 90" SHALL BE REQUIRED)
8019	1 EA	REMOVE AND DISPOSE OF EXISTING EQUIPMENT
8028	18 LF	WOOD SIGN SUPPORT 4" X 6"
8029	242 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8030	30 LF	1" ELECTRICAL CONDUIT- GALVANIZED RISER
8033	1 EA	3" WEATHERHEAD
8036	245 LF	4" SCHEDULE 80 PVC CONDUIT- BORED
8037	20 LF	2" SCHEDULE 80 PVC CONDUIT- TRENCHED
8038	35 LF	3" SCHEDULE 80 PVC CONDUIT- TRENCHED
8039	40 LF	4" SCHEDULE 80 PVC CONDUIT- TRENCHED
8043	20 LF	1" LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8045	1 EA	ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 VOLTS 60 AMPS
8046	60 LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG -THHN/THWN (3 WIRES)
8050	3 EA	3 SET MIRCOLOOP PROBES, 500' LEAD IN CABLE
8052	2 EA	ELECTRICAL HANDHOLE
8054	12 SF	INSTALL GROUND MOUNTED SIGN
8055	35 SF	INSTALL OVERHEAD SIGN
8056	1 EA	VIDEO DETECTOR CAMERA
8069	1 EA	250 WATT HPS LAMP AND LUMINAIRE
8073	3 EA	GROUND ROD (3/4" DIA X 10' LENGTH)
8075	18 EA	12" VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8078	2 EA	CUT, CLEAN GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
8083	85 LF	ELECTRICAL CABLE 5- CONDUCTOR NO.14 AWG
8084	740 LF	ELECTRICAL CABLE 7- CONDUCTOR NO.14 AWG
8085	265 LF	ELECTRICAL CABLE 2- CONDUCTOR NO.12 AWG TC
8089	1 EA	15' LIGHTING ARM ON SIGNAL STRUCTURE
8094	1 EA	INSTALL CONTROLLER AND BASE MOUNTED CABINET

# EQUIPMENT LIST "C"

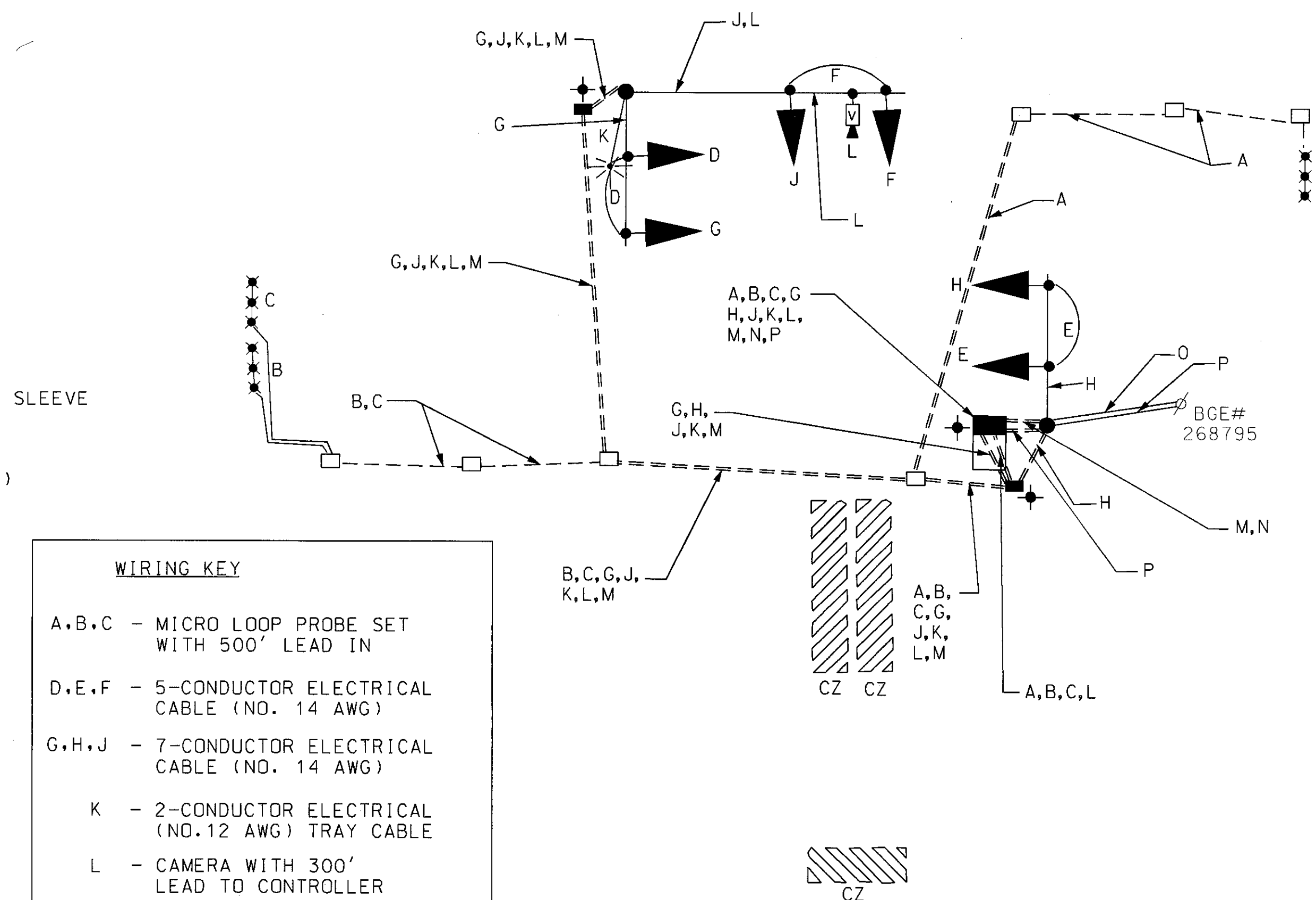
SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL MATERIAL/EQUIPMENT TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

## EXISTING PHASING

1	2	3	4	5	6
R	R	R	R	R	R
Y	Y	Y	Y	Y	Y
G	G	G	G	G	G

Phase 2 & 6	G	G	G	G	R	R	←
2 & 6 Change	Y	Y	Y	Y	R	R	→
Phase 4	R	R	R	R	G	G	↑
4 Change	R	R	R	R	Y	Y	↓
Flashing	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	↕
Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	+

## WIRING DIAGRAM



## WIRING KEY

- A, B, C - MICRO LOOP PROBE SET WITH 500' LEAD IN
- D, E, F - 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- G, H, J - 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- K - 2-CONDUCTOR ELECTRICAL (NO. 12 AWG) TRAY CABLE
- L - CAMERA WITH 300' LEAD TO CONTROLLER
- M - NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- N - 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 AWG)-THHN/THWN (3 WIRES)
- O - OVERHEAD SERVICE FEED BGE POLE # 268795
- P - PROPOSED PHONE SERVICE
- CZ - CAMERA DETECTOR ZONE
- ◆ - 3/4 IN. x 10 FT. GROUND ROD

**CENTURY ENGINEERING, INC.**  
CONSULTING ENGINEERS - PLANNERS  
32 WEST ROAD  
TOWSON, MARYLAND 21204

SHA #: BA 445451/807 TOD #: AT357-25  
**MARYLAND DOT - STATE HIGHWAY ADMINISTRATION**  
Office of Traffic & Safety  
**TRAFFIC ENGINEERING DESIGN DIVISION**  
GENERAL INFORMATION SHEET  
MD 122 (SECURITY BLVD.) / COOKS LN. AND FOREST PARK AVE.

DRAWN BY: S.P.	F.A.P. NO.	TS NO.
CHECKED BY: E.M.M. + TH	S.H.A. NO.	4293C
SCALE: N/A	COUNTY: BALTIMORE	T.I.M.S. NO.
DATE: 3/12/04	LOG MILE: 03012202.91	G251
		SHEET NO.
		2 OF 2